

CLAIMS

1. A digital communication system comprising nodes, the nodes including a central node and at least two peripheral nodes, the central node comprising all means for the communication in the system and a memory for storing information related to the system itself and/or the individual nodes, the nodes each comprising a transmitter and a receiver, and information only being directly transferred between the central node and each of the peripheral nodes, **characterized** by (control means) in the central node for transferring information stored in the memory means related to the system and/or the individual nodes to every peripheral node.

2. A digital communication system according to claim 1, **characterized** in that each peripheral node comprises means for storing said information.

3. A digital communication system according to claim 1, ¹⁴ **characterized** in that the direct transferring of information is made wireless, in particular using short range radio waves.

4. A digital communication system according to claim 1, ¹² **characterized** in that the control means in the central node are arranged to transfer address information comprising at least one address of each of the peripheral nodes.

5. A digital communication system according to claim 1, ¹³ **characterized** in that the control means in the central node are arranged to transfer compatibility related information.

6. A digital communication system according to claim 1, ¹⁵ **characterized** in that the system is a Bluetooth piconet.

7 (7) A digital communication system according to claim 1,
characterized in that a first one of the nodes is a central
node of a first group of the nodes and a second one of the
nodes is a central node of a second group of the nodes, the
5 first and second nodes being different nodes and the nodes
being capable of being members in both the first and second
group, each node having first memory means for storing
information relating to information on the first one of the
10 nodes and on the nodes of the first group and second memory
means for storing information relating to information on the
second one of the nodes and on the nodes of the second group.

15 (8) A digital communication system according to claim 7,
characterized in that the nodes have control units connected
to the transmitters and receivers for transferring to a
central node information on a change of a node to being or
20 to finishing being a member in both the first and second
groups.

25 9. A method in a digital communication system comprising nodes,
the nodes including a central node and at least two
peripheral nodes, information only being directly transferred
between the central node and each of the peripheral nodes,
the central node controlling all the communication in the
system, and information related to the system itself and/or
the individual nodes being stored in the central node,
characterized in that information related to the system
and/or the nodes is transferred to every peripheral node.

30 —10. A method according to claim 9, characterized in that part of
said information transferred to every peripheral node is
derived from information conveyed from the peripheral nodes
to the central node when requested by the central node.

—11. A method according to claim 9, characterized in that part of
said information transferred to every peripheral node is
derived from information conveyed from the peripheral nodes

to the central node initiated by the peripheral nodes in particular triggered by an event in the respective peripheral node.

12. A method according to claim 9, **characterized** in that said information is, entirely or in part, address information comprising an address of each of the peripheral nodes.

13. A method according to claim 9, **characterized** in that said information is, entirely or in part, compatibility related information.

10 — 14. A method according to claim 9, **characterized** in that all direct transfer of information is made wirelessly, in particular using short range radio waves.

— 15. A method according to claim 9, **characterized** in that the digital communication system is a Bluetooth piconet.

15 a 16. A method according to ^{claim 9} ~~any of claim 9-15~~, **characterized** in that the transferring of said information is performed using a Bluetooth broadcast mechanism.

a 17. A method according to ^{claim 9} ~~any of claim 9-15~~, **characterized** in that the transferring of said information is performed using the (Bluetooth unicast system) to each peripheral node in turn.

a 18. A method according to ^{claim 9} ~~any of claim 9-17~~, **characterized** in that the transferring of said information is made using the (Bluetooth LMP protocol).

a 19. A method according to ^{claim 9} ~~any of claim 9-17~~, **characterized** in that the transferring of said information is made using a protocol layer between the L2CAP and the network layer, said protocol layer emulating a shared medium network towards the network layer.

1 — 20. A method according to ~~any of claim 13-19~~, characterized in that the transferring of said information is made when a new peripheral node joins the digital communication system.

2 — 21. A method according to ~~any of claim 13-20~~, characterized in that, when a new peripheral node joins the system, the part of said information related to all the other peripheral nodes is transferred from the central node to said new peripheral node.

3 — 22. A method according to ~~any of claim 9-20~~, characterized in that a message is transferred from the central node to all the peripheral nodes when one of the peripheral nodes has left the system.

4 — 23. A method according to claim 9, wherein a first one of the nodes is a master node of a first group of the nodes, a second one of the nodes is a master node of a second group of the nodes, [the first and second ones of the nodes being different nodes and the group of first nodes and the group of second nodes together with the second one of the nodes having a node in common,] this node being a forwarding node, characterized in that when a node changes from being a forwarding node to not being a forwarding node, or vice versa, a message is sent to all the nodes in the first and second groups except the node itself.

5 — 24. A method according to claim 23, characterized in that the message is sent from the master nodes of the first and second groups.

6 — 25. A method according to claim 23, characterized in that the message is sent from the node itself.

7 — 26. A method according to claim 23, characterized in that before sending the message, information of the change of forwarding node status in the node is transferred from the node to the

master node of the first group, and to the master node of the second group, provided that the node is not the master node of the second group.